

### **REMARKS**

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Claims 2-4 and 6-17 pending in the present application. Claims 9, 11, and 13 are independent claims. By this Response, claims 1 and 5 are cancelled, claims 2-4 and 6-8 are amended, and claims 9-17 are added. Also by this response the specification is amended to capture the disclosures previously made by claims 1 and 5. Reconsideration and Allowance based on the above amendments and following remarks are respectfully requested.

#### **Claim Objections**

Claims 1 and 5 are objected to due to informalities. These claims have been cancelled, rendering the objection moot.

#### **35 U.S.C. §102(e) Epps Rejection**

Claims 1-8 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,977,930 to Epps et al. (hereinafter "Epps"). Concerning independent claims 1 and 5, these claims have been cancelled in the present application and replaced with independent claims 9 and 11 respectively. This rejection, insofar as it pertains to the presently pending claims, is respectfully traversed.

Independent claim 9 pertains to "scheduling available bandwidth of transmission links between class-of-service specific FIFO queues using a bandwidth scheduling discipline that ensures instantaneous availability of unutilized portions of bandwidth from all service classes to all effort-based service classes in a specific, consistent, configurable, ratio by assigning a priority value to a packet based on a combination of the packet's class of service and the subgroup information (such as drop precedence) of the packet or at least one packet immediately preceding or following said packet."

Epps discloses "a pipelined linecard architecture for receiving, modifying, switching, buffering, and queuing packets for transmission in a communication network." Epps is mainly concerned with moving packets into and through a linecard architecture, and only teaches using a well-known Deficit Round Robin (DRR) or a Modified Deficit Round Robin (MDRR) scheduling algorithm for scheduling transmission bandwidth between class of service (CoS) output queues. (Col. 20, lines 6-63). In both the known DRR embodiments referenced by Epps and the embodiment of the MDRR scheduling algorithm disclosed by Epps, each CoS queue is sequentially emptied such that no lower-class queue will be granted access to bandwidth if a higher-class queue still has data in it. (Col. 18, lines 37-67). This does not ensure "instantaneous availability of unutilized portions of bandwidth from all service classes to all effort-based service classes in a specific, consistent, configurable, ratio" as required by independent claim 9.

It is respectfully submitted that Epps discloses, at most, a linecard architecture using known variants of the Deficit Round Robin algorithm to schedule bandwidth for packet transmission. Applicants respectfully submit that Epps fails to teach "instantaneous availability of unutilized portions of bandwidth from all service classes to all effort-based service classes in a specific, consistent, configurable, ratio" as required by independent claims 9 and 11.

At least for the reasons set forth above, Applicants respectfully submit that independent claims 9 and 11 are allowable. Accordingly, it is respectfully submitted that claims 2-4, 6-8, 10, and 12 are allowable at least by virtue of their dependency on claims 9 and 11. Thus, reconsideration and withdrawal of this rejection is respectfully requested.

Conclusion

Favorable consideration and allowance of all claims is earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Michael K. Mutter, Reg. No. 29,680 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted, #40,439

By 

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